Listing of Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Please amend claims 20 and 40.

- 1. (Previously Presented) A recombinant expression construct comprising at least one regulated promoter operably linked to a first nucleic acid encoding a polypeptide having at least 95% identity to a human adenine translocator polypeptide 3 (ANT3) polypeptide comprising the amino acid sequence set forth in SEQ ID NO:33.
- 2. (Original) The expression construct of claim 1 further comprising at least one additional nucleic acid sequence that regulates transcription.
- 3. (Original) The expression construct of claim 2 wherein the additional nucleic acid sequence that regulates transcription encodes a repressor of said regulated promoter.
- 4. (Previously Presented) The expression construct of claim 1 wherein the polypeptide comprises the amino acid sequence set forth in SEQ ID NO:33.

5. –7. (Cancelled)

- 8. (Previously Presented) An expression construct according to claim 1 wherein the polypeptide is expressed as a fusion protein with a polypeptide product of a second nucleic acid sequence.
- 9. (Original) The expression construct of claim 8 wherein the polypeptide product of said second nucleic acid sequence is an enzyme.

- 10. (Original) The expression construct of claim 8 wherein said fusion protein localizes to membranes.
- 11. (Original) The expression construct of claim 10 wherein said membranes are mitochondrial membranes.
- 12. (Original) An expression construct according to claim 1 wherein the adenine nucleotide translocator polypeptide is expressed as a fusion protein with at least one product of a second nucleic acid sequence encoding a polypeptide cleavable by a protease, said adenine nucleotide translocator polypeptide being separable from the fusion protein by cleavage with the protease.
- 13. (Original) A host cell comprising a recombinant expression construct according to claim 1.
- 14. (Original) A host cell according to claim 13 wherein the host cell is a prokaryotic cell.
- 15. (Original) A host cell according to claim 13 wherein the host cell is a eukaryotic cell.
- 16. (Original) The host cell of claim 15 wherein the eukaryotic cell is selected from the group consisting of a yeast cell, an insect cell and a mammalian cell.
- 17. (Original) The host cell of claim 16 wherein the insect cell is selected from the group consisting of an Sf9 cell and a *Trichoplusia ni* cell.
- 18. (Original) A host cell according to claim 13 that lacks at least one isoform of an endogenous adenine nucleotide translocator.

- 19. (Original) A host cell according to claim 13 in which expression of at least one gene encoding an endogenous adenine nucleotide translocator isoform is substantially impaired.
- 20. (Currently Amended) A recombinant expression construct comprising at least one <u>regulated</u> promoter operably linked to a nucleic acid molecule comprising a first nucleic acid sequence and a second nucleic acid sequence, said first nucleic acid sequence encoding a polypeptide having at least 95% identity to a human adenine nucleotide translocator 3 (ANT3) polypeptide comprising an amino acid sequence set forth in SEQ ID NO:33, wherein said polypeptide is expressed as a fusion protein with a polypeptide product of said second nucleic acid sequence.
- 21. (Original) The expression construct of claim 20 wherein the polypeptide product of said second nucleic acid sequence is an enzyme.
- 22. (Original) The expression construct of claim 20 wherein said fusion protein localizes to membranes.
- 23. (Original) The expression construct of claim 22 wherein said membranes are mitochondrial membranes.
- 24. (Original) The expression construct of claim 20 further comprising at least one additional nucleic acid sequence that regulates transcription.
- 25. (Original) The expression construct of claim 24 wherein the additional nucleic acid sequence that regulates transcription encodes a repressor of said promoter.
- 26. (Previously Presented) The expression construct of claim 20 wherein the polypeptide comprises the amino acid sequence set forth in SEQ ID NO:33.

27. - 29. (Cancelled)

- 30. (Original) An expression construct according to claim 20 wherein the adenine nucleotide translocator polypeptide is expressed as a fusion protein with at least one product of a second nucleic acid sequence encoding a polypeptide cleavable by a protease, said adenine nucleotide translocator polypeptide being separable from the fusion protein by cleavage with the protease.
- 31. (Original) A host cell comprising a recombinant expression construct according to claim 20.
- 32. (Original) A host cell according to claim 31 wherein the host cell is a prokaryotic cell.
- 33. (Original) A host cell according to claim 31 wherein the host cell is a eukaryotic cell.
- 34. (Original) The host cell of claim 33 wherein the eukaryotic cell is selected from the group consisting of a yeast cell, an insect cell and a mammalian cell.
- 35. (Original) The host cell of claim 34 wherein the insect cell is selected from the group consisting of an Sf9 cell and a *Trichoplusia ni* cell.
- 36. (Previously Presented) A host cell according to claim 31 that lacks at least one isoform of an endogenous adenine nucleotide translocator.
- 37. (Previously Presented) A host cell according to claim 31 in which expression of at least one gene encoding an endogenous adenine nucleotide translocator isoform is substantially impaired.

- 38. (Original) A recombinant expression construct according to either claim 1 or claim 20 wherein the expression construct is a recombinant viral expression construct.
- 39. (Original) A method of producing a recombinant adenine nucleotide translocator polypeptide, comprising:

culturing a host cell comprising a recombinant expression construct comprising at least one regulated promoter operably linked to a first nucleic acid encoding an adenine nucleotide translocator polypeptide.

40. (Currently Amended) A method of producing a recombinant adenine nucleotide translocator 3 (ANT3) polypeptide, comprising:

culturing a host cell comprising a recombinant expression construct comprising at least one <u>regulated</u> promoter operably linked to a nucleic acid molecule comprising a first nucleic acid sequence and a second nucleic acid sequence, said first nucleic acid sequence encoding a polypeptide having at least 95% identity to a human ANT3 polypeptide comprising a sequence set forth in SEQ ID NO:33, wherein the ANT3 polypeptide is expressed as a fusion protein with a polypeptide product of said second nucleic acid sequence.

41. (Original) A method of producing a recombinant adenine nucleotide translocator polypeptide, comprising:

culturing a host cell infected with the recombinant viral expression construct of claim 38.

42. – 112. (Cancelled)